

FORM PTO-1449 U.S. Department of Commerce  
(Rev. 4/92) Patent and Trademark Office

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use several sheets if necessary)

ATTY. DOCKET NO.

503.30414C14

SERIAL NO.

APPLICANT  
KATO, et al.

FILING DATE  
December 16, 1999

GROUP  
3749

JD564 U.S. PTO  
09/461432  
12/16/99

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SMK	3 6 5 2 4 4 4	2-72	Lester, et al.			
SMK	3 9 8 1 7 9 1	9-76	Rosvold			
SMK	4 2 2 6 8 9 7	10-80	Coleman			
SMK	4 3 1 1 4 2 7	1-82	Coad, et al.			
SMK	4 3 1 3 8 1 5	2-82	Graves, Jr. et al.			
SMK	4 4 4 9 8 8 5	5-84	Hertel, et al.			
SMK	4 4 5 7 6 6 1	7-84	Flint, et al.			
SMK	4 5 3 4 3 1 4	8-85	Ackley			
SMK	4 5 6 3 2 4 0	1-86	Shibata, et al.			
SMK	4 6 3 4 3 3 1	1-87	Hertel			
SMK	4 7 0 5 9 5 1	11-87	Layman, et al.			

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO
SMK	6 2 8 9 8 8 1	4-87	Japan		X
SMK	6 2 2 0 7 8 6 6	9-87	Japan		X
SMK	1 3 1 9 7 0	2-89	Japan		X
SMK	1 3 1 9 7 1	2-89	Japan		X
SMK	6 3 6 5 8 2	1-89	Japan		X
SMK	1 1 3 5 0 1 5	5-89	Japan		X

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

SMK	R.P.H. Chang, "Multipurpose plasma reactor for materials research and processing", J. Vac. Sci. Technol., Vol. 14, No. 1, Jan./Feb. 1977, pages 278-280.

EXAMINER

Steve Ganni

DATE CONSIDERED

3-14-00

EXAMINER: Initial if citation is considered, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SMK	4 7 1 5 7 6 4	12-87	Hutchinson			
SMK	4 8 5 1 1 0 1	7-89	Hutchinson			
SMK	4 8 3 6 7 3 3	6-89	Hertel, et al.			
SMK	4 8 3 6 9 0 5	6-89	Davis, et al.			
SMK	4 8 9 5 1 0 7	1-90	Yano, et al.			
SMK	4 9 0 2 9 3 4	2-90	Miyamura, et al.			
SMK	4 9 0 3 9 3 7	2-90	Jakuniec, et al.			
SMK	4 9 0 9 6 9 5	3-90	Hurwitt, et al.			
SMK	4 9 1 1 5 9 7	3-90	Maydan, et al.			
SMK	4 9 1 5 5 6 4	4-90	Error, et al.			
SMK	4 9 1 7 5 5 6	4-90	Stark, et al.			

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO
SMK	2 6 5 2 5 2	3-90	Japan		X
SMK	6 4 1 2 0 3 7	1-89	Japan		X

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**


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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SMG	5 0 0 7 9 8 1	4-91	Kawasaki, et al.			
SMG	5 2 9 2 3 9 3	3-94	Maydan, et al.			
SMG	5 4 5 2 1 6 6	9-95	Aylwin, et al.			
SMG	5 5 0 4 0 3 3	4-96	Bajor, et al.			
SMG	5 5 0 4 3 4 7	4-96	Jovanovic, et al.			
SMG	5 5 5 6 7 1 4	9-96	Fukuyama, et al.			
SMG	5 6 5 1 8 5 8	7-97	Lin			
SMG	5 6 7 5 4 6 1	10-97	Aylwin, et al.			
SMG	4 3 1 3 7 8 3	2-82	Davies, et al.			
SMG	4 3 1 8 7 6 7	3-82	Hijkata, et al.			

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SMS	4 9 2 4 8 9 0	5-90	Giles, et al.	134	902	
SMA	4 9 3 6 3 2 9	6-90	Michael, et al.	134	902	
SMA	5 0 1 4 2 1 7	5-91	Savage	364	550	
SMA	5 0 0 7 9 8 1	4-91	Kawasaki, et al.			
SMA	4 1 3 8 3 0 6	2-79	Niwa	156	345	
SMA	4 5 7 6 6 9 8	3-86	Gallagher, et al.	204	192	
SMA	5 0 1 4 2 1 7	5-91	Savage	364	498	
SMA	5 3 5 1 4 1 5	10-94	Brooks, et al.	34	389	
SMA	4 6 4 3 6 2 9	2-87	Takahashi, et al.	414	331	
SMA	4 8 2 4 3 0 9	4-89	Takehi, et al.	414	217	
SMA	4 9 5 1 6 0 1	8-90	Maydan, et al.	414	217X	

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
SMA	2 0 3 8 1 3 3 8	5-90	Europe				
SMA	6 4 1 2 0 3 7	1-89	Japan				
SMA	4 3 0 5 4 9	4-92	Japan				
SMA	8 7 0 7 3 0 9	5-87	PCT Int'l Appl.				
SMA	2 9 4 6 4 7	4-90	Japan				
SMA	6 0 2 4 6 6 3 5	12-85	Japan				

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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SML	5 5 0 9 7 7 1	4-96	Hiroki	414	217	
SML	5 4 6 2 3 9 7	10-95	Iwabuchi	414	222	
SML	5 6 8 5 6 8 4	11-97	Kato, et al.	414	217	

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
SML	1 2 9 8 1 8 0	12-89	Japan				
SML	2 0 2 4 6 4 5 3	4-87	Europe				
SML	2 6 5 2 5 2	3-90	Japan				

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**


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<b>Form PTO-1449</b>  <b>U.S. DEPARTMENT OF COMMERCE</b> <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT</b> <b>BY APPLICANT</b>  (Use several sheets if necessary)	<b>ATTY. DKT. NO.</b> 503.30414C14	<b>SERIAL NO.</b> 09/461,432
	<b>APPLICANT</b> KATO, et al.	
	<b>FILING DATE</b> December 16, 1999	<b>GROUP</b> 3749

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date
SMC	AA	4,969,790	11/13/90	Petz et al.		10/24/88
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					

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09/461432  
12/16/99

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
SMC	AM	2-61064	03/01/90	Japan			x
SMC	AN	1-310553	12/14/89	Japan			x
SMC	AO	1-251734	10/06/89	Japan			x
SMC	AP	62-44571	02/26/87	Japan			x
SMC	AQ	62-50463	03/05/87	Japan			x
SMC	AR	2-106037	04/18/90	Japan			x
SMC	AS	57-29577	02/17/82	Japan			x
SMC	AT	63-153270	06/25/88	Japan (w/complete translation)			x

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

SMC	AU	Semiconductor Equipment Association of Japan, "Terminological Dictionary of Semiconductor Equipment), front, table, page 183, back, Nov. 20, 1987.
SMC	AV	Semiconductor Equipment Association of Japan, "Semiconductor News", Vol. 4, pp. 38-43, April 10, 1987 (w/translation).
	AW	
	AX	
	AY	
	AZ	
<b>Examiner</b> Steve Gavrin		<b>Date Considered</b> 3-14-00